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A sterility-maintaining connection system for medical systems and use thereof

Claims

1. A connection system for the connection of in particular two or more sterile systems, comprising at least a male connecting element (2) forming a closed end of a sterile, fluid-containing system and at least a female connecting element (1) forming the closed end of a second sterile, fluid-containing system which can be aseptically connected to one another,

characterized in that

both connecting elements (1, 2) each have a predetermined breaking point (7, 8) being arranged one above the other when the two connecting elements (1, 2) are assembled so that they form a common predetermined breaking point and can be broken off together, with the predetermined breaking point being located inside the fluid-containing system.
2. A connection system according to claim 1, characterized in that the two connecting elements (1, 2) can be connected to each other in a positively locking manner.

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a

CLAIM 1

3. A connection system according to ~~one or more of the preceding claims~~, characterized in that the connecting elements (1, 2) can be connected to each other by means of a screw thread.

a

CLAIM 1

4. A connection system according to ~~one or more of the preceding claims~~, characterized in that the connecting elements (1, 2) can be connected to each other by means of a snap-in connection.

a

CLAIM 1

5. A connection system according to ~~one or more of the preceding claims~~, characterized in that the connecting elements (1, 2) can be connected to each other by means of an adhesive connection.

a

CLAIM 1

6. A connection system according to ~~one or more of the preceding claims~~, characterized in that the adhesive connection is a quick-hardening adhesive.

a

CLAIM 1

7. A connection system according to ~~one or more of the preceding claims~~, characterized in that a disinfectant is provided between the contacting contact surfaces (9, 11) of the connecting elements (1, 2).

a

CLAIM 1

8. A connection system according to ~~the preceding claim~~, characterized in that the disinfectant has bonding properties.

a

CLAIM 8

9. A connection system according to ~~the preceding claim~~, characterized in that the disinfectant is a quick-hardening adhesive.

a

CLAIM 1

10. A connection system according to ~~one or more of the preceding claims~~, characterized in that cyanoacrylate is provided for connecting the two connecting elements (1, 2).

a

CLAIM 1

11. A connection system according to ~~one or more of the preceding claims~~, characterized by a protective cap (22) the external contour of which is matched to the male connecting element.

CLAIM 1

12. A connection system according to ~~one or more of the preceding~~ claims, characterized by a protective cap (22) in the form of a male connecting element that is connectable to the female connecting element (1) for the protection thereof.
13. A female connecting element (1) which forms the closed end of a fluid-containing system, for the connection with a male connecting element (2) which forms the end of a second fluid-containing system, characterized in that the female connecting element (1) has a predetermined breaking point (8).
14. A male connecting element (2) which forms the closed end of a fluid-containing system, for the connection with a female connecting element (1) which forms the end of a fluid-containing system, characterized in that the male connecting element (2) has a predetermined breaking point (7).
15. Use of a connection system according to claim 1 for the sterile transfer of fluid within a bag system, comprising at least two bags and a tube system.
16. Use of a connection system according to claim 15 for the sterile transfer of biological or medical fluids in a bag system having at least two bags and a tube system.
17. Use of a connection system according to claim 15 ~~and 16~~ in a sterile blood bag system for the sterile transfer of blood or blood components.

CLAIM 15

18. Use of a connection system according to ~~claims 15 to 17~~ in a bag and tube system having at least one filter element for the sterile transfer of blood or blood components.
19. Use of a connection system according to claim 15 in a bag system for the sterile transfer of infusion solutions or dialysis solutions.